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February 13, 1998

EX PARTE OR LATE FILED

VIA HAND DELIVERY

Magalie Roman Salas, Esq.
Secretary
Federal Communications Commission
1919 M Street, N.W.
Washington, D.C. 20554

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FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

Re: Amendment of Parts 2 and 15 of the Commission's Rules to Deregulate the
Equipment Authorization Requirements for Digital Devices

✓ ET Docket 95-19

Intel Corporation Request for Postponement of Effective Date of Rule
and Petition for Reconsideration

WRITTEN EX PARTE PRESENTATION

Dear Ms. Salas:

I am writing on behalf of our client Intel Corporation ("Intel") to provide supplementary information regarding Intel's request for postponement of the effective date of the "cover off" testing rule adopted in the above-referenced proceeding. As shown below, Intel has been working diligently to comply with the cover off rule for its next generation of chips and motherboards, and can do so at the overwhelming majority of frequencies, but requires additional time to comply fully. Also as shown below, Intel believes that it is likely that assembled computers using the next generation of Intel microprocessors and motherboards will comply with the substantive emissions limitations in the Commission's rules.

Since the Commission adopted the cover off rule, Intel has worked to ensure compliance with the testing requirements of that rule. In that process, Intel has discovered that the cover off rule requires an entirely new approach to emissions control. In effect, manufacturers must consider in greater detail how each component contributes to addressing emissions issues to comply with the cover off rule. Consequently, changes must be made at the board and component level, not at the level of the fully assembled system.

The compliance issues created by this significant shift in the Commission's regulatory paradigm have been exacerbated by the ongoing increases in clock speeds for both buses and processors. These result in significant changes in the emissions characteristics of both the

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components used in the motherboard and the traces on the motherboard.^{1/} The relatively short transition period adopted by the Commission (especially as compared to the transition period when the Commission first promulgated rules for digital devices) also has increased the difficulty of compliance.

Despite these difficulties, Intel's testing shows that its next generation motherboards now comply with the cover off rule at all but a handful of frequencies. Although the exact frequencies with excess emissions vary depending on the configuration tested, the motherboards comply with the cover off limits at all frequencies up to 350 MHz and above 960 MHz. Within the range from 350 MHz to 960 MHz, only a small number of frequencies have emission levels that exceed the cover off limits, ranging from emissions that are just barely over the limits to a few frequencies that, in Intel's most recent tests, now show emissions up to 10 dB over the cover off limits. Intel anticipates that it will be able to somewhat reduce these emissions before it ships these products, but that, for the reasons described below, it will not be able to bring emissions at these few frequencies below the cover off limits. Based on its tests of PC enclosures, however, Intel believes that it is highly likely that PCs built using these motherboards will comply with the Commission's substantive emissions requirements for assembled digital devices.

As described in Intel's petition for reconsideration in this proceeding, Intel has explored and continues to explore many techniques for reducing emissions. These techniques include processor shielding, spread spectrum clocking and modified board layouts. Intel also has been working with vendors — such as clock manufacturers — to reduce emissions. Intel expects that these approaches will, in the long run, reduce emissions sufficiently to comply with the cover off rule. Indeed, some of these techniques already have been used to reduce the emissions from the next generation motherboards now being developed. Intel does not believe that compliance with the cover off rule will require any breakthroughs, but rather is a matter of engineering and obtaining components that will permit compliance. For that reason, Intel has devoted significant engineering resources to this problem and, as noted above, continues to work with component vendors. Nevertheless, there are significant limitations on Intel's ability to further speed the compliance process. For instance, today there is only one vendor of spread spectrum clocking technology that can meet Intel's specifications, and that vendor cannot produce its product in sufficient volume to meet demand. Intel fully expects that vendors will meet requirements in the future, but they cannot do so at this time.

^{1/} In fact, one result of the increase in speeds is that some traces are now as long as one-half of a wavelength at certain frequencies.

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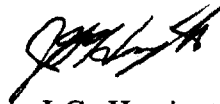
For this reason, Intel continues to seek an extension of the time to comply with the cover off testing rule. Based on its production and manufacturing cycles, Intel seeks an extension that would permit it to manufacture and market the generation of motherboards now under development. To meet this need, a postponement of the effectiveness of the testing requirements until June 30, 1998, would be necessary, and it would be necessary to allow motherboards first put into production by June 30 to be sold until January 1, 1999. At that point, full compliance would be required.

Intel continues to remain committed to compliance with the principles behind the Commission's emissions rules and the substantive emissions limitations in the Commission's rules. For that reason, to the extent that it feasible to do so, Intel will attempt to further reduce emissions during the production cycle of any motherboard design covered by the postponement of the cover off rule.^{2/}

By this letter, I also am requesting that the Commission allow Intel to withdraw its pending petition for reconsideration in this proceeding. To the extent that the Commission grants the relief requested in this letter, reconsideration no longer will be necessary.

Pursuant to Section 1.1206(a)(1) of the Commission's Rules, an original and one copy of this letter are being submitted to the Secretary's office. Please inform me if any questions should arise in connection with this filing.

Respectfully submitted,



J.G. Harrington

Counsel to Intel Corporation

cc: Richard Smith
Julius Knapp
Karen Rackley

^{2/} In general, such modifications would take the form of replacing a component with an equivalent component that had lower emissions.